

## Presentation of the “ESTG Masters” Case: An Academic Practice Applied to Master's Degrees

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### Abstract

*Higher education faces significant challenges stemming from digital transformation, the increasing complexity of the job market, and the need to develop soft skills in students. Innovative pedagogical practices are emerging that seek to complement traditional models of theoretical teaching, promoting scientific research, communication, and critical thinking. This article aims to present and analyse the ESTG Masters, a postgraduate research symposium organised by the School of Technology and Management of the Polytechnic Institute of Porto, as an integrated academic practice in the training of master's students. The research is based on a case study, employing a mixed methodology, based on document analysis, satisfaction questionnaires and semi-structured interviews with students distinguished with the "Best Paper - ESTG Masters" award. The data collected, covering the 2023 to 2025 editions, show high levels of satisfaction and recognise the event's valuable contributions to the development of oral and written communication skills, perseverance in dissertation writing, and the validation of the scientific work developed.*

**Keywords:** *Higher Education, ESTG Masters; Department of Legal and Social Sciences; Pedagogical Practices; Digital Transformation*

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## 1. Introduction

Higher education faces increasing pressures related to digital transformation and socioeconomic development. These pressures are reflected concretely in daily decisions about the organization, delivery, and evaluation of teaching, and are no longer limited to abstract reforms. Curriculum design is particularly affected, as expectations regarding graduate profiles increasingly influence how programs reconcile technical knowledge, critical thinking,

and an interdisciplinary approach. As a result, academic practices are emerging that complement traditional theoretical teaching with methodologies that foster scientific research, resulting in the development of skills in communication, critical thinking, and problem-solving (Pereira Júnior, et al., 2023). In legal education, the implementation of these academic practices is particularly demanding due to its roots, traditionally based on a lecture-based model (Nunes, 2016). However, growing professional demands create strong expectations that graduates will have, in addition to the obvious technical skills, the ability to communicate and integrate different content in different contexts (Zorrilla Esparza, 2025).

It is within this complex set of challenges of the 21st century that ESTG Masters emerges as a scientific event organised by the School of Technology and Management (ESTG) of the Polytechnic Institute of Porto, which seeks to disseminate the results of research being carried out by master's students. This event complements the dissertation with an approach that encourages the sharing of scientific knowledge, public discussion, and the development of cross-cutting communication skills that are relevant to the training of master's students. The relevance of this study is based on the observation that ESTG Masters is becoming a significant element in the educational path of master's students in the Department of Legal and Social Sciences, namely the Master's in Legal Practice and the Master's in Digital Legal Practices. The main objective is, therefore, to present and analyse the scientific event known as ESTG Masters, highlighting its institutional positioning, structure, and mode of operation, as well as its contribution to the training of master's students. This article contributes to the literature by conceptualising internal scientific events as pedagogical devices that structure research socialisation and formative trajectories within legal master's programmes.

## **2. Conceptual framework**

Higher education currently balances demanding formation with the short-term skill expectations of an unstable labour market (Figueiredo et al., 2022). While digitalization has become institutional infrastructure, its success depends on technology following clear educational purposes (Ramos, 2023). Simultaneously, internationalization responds to geopolitical uncertainty through selective digital collaboration (Barata, 2019), and structural inclusion remains dependent on support measures that often collide with limited resources (Coelho & Menezes, 2021). Consequently, the shift toward active learning reflects an attempt to sustain engagement through concrete tasks rather than passive content absorption (Gosavi & Deore, 2023).

## **3. Institutional context**

ESTG, part of the Polytechnic Institute of Porto, was created on 14 July 1999 and is the only public higher education institution in the Tâmega and Sousa region. Two specific

circumstances led to the decision to establish the School in the municipality of Felgueiras. On the one hand, there was a lack of public higher education in the region and, on the other, there was a complex and diverse business ecosystem, characterised by the existence of small and medium-sized production units with a dominant industrial profile and a mono-sectoral focus.

All courses offered by the School of Technology and Management are guided by a strategy of collaboration with the surrounding social context and promote the sustainable development of the Tâmega and Sousa region. Currently, the educational offering consists of seven bachelor's degrees, eight master's degrees and nine higher professional technical courses organised into five fundamental scientific areas: Business Sciences, Computer Science, Legal and Social Sciences, Safety, Health and Environment, and Natural and Exact Sciences.

The Department of Legal and Social Sciences (DCJS) offers a Bachelor's Degree in Legal Practice, a CTeSP in Legal Informatics, and two Master's Degrees: Legal Practice (specialising in Contracts, Companies, Registries/Notary, and Civil Procedure) and Digital Legal Practices, which bridges legal sciences and computer science.

## **4. The ESTG Masters case**

### **4.1. Characterization**

ESTG Masters is an annual scientific event in which second-year students from all ESTG master's programmes participate. Participation consists of the presentation and public discussion of the research work they are developing in the second year of the course, that is, the year in which they are writing their dissertation. It is an opportunity for sharing, discussion, but also for validating the knowledge produced. In addition to students, teachers, graduates, and external guests are also involved. The event is jointly organised by the directors of the school's various master's programmes and CIICESI, and in 2026, it will be in its 16th edition.

### **4.2. Structure and operation**

In the first phase, students, together with their advisors, submit their paper on a platform (e.g., Open Review), which is then reviewed by two students and a faculty member. After the peer review process, the final version is submitted and presented on the day designated for the scientific event. The event consists of a plenary session, parallel sessions, and a closing session. The plenary session opens the event and features a presentation on a topic by a highly specialized external guest. The aim is to find a topic that is relevant to all master's degrees. Topics such as the following have already been addressed: “The Impact of Disinformation on Safeguarding Democracy” (2026); “Mental Health in the Workplace” (2025); “Artificial Intelligence in Investigation” (2024); “Digital Transformation” (2023); “Surviving Fake News

in the Post-Truth Era” (2022). The parallel sessions are organised by master's degrees or areas of knowledge and begin with a presentation by a graduate of the respective master's degree, followed by the presentation of articles submitted by current students. This results in a debate and exchange of ideas on the topic being researched, with the expectation of relevant contributions to the development of the master's thesis. This is because each presentation is followed by a discussion before an audience composed of peers and lecturers. At the end of the day, there is a closing session where the authors of the works awarded as “BEST PAPER – ESTG Masters” are announced. This scientific event represents an educational practice integrated into the training programme for master's students, with weighting in the assessment of different course units, reinforcing applied research skills.

## **5. Methodology**

This article is based on a case study, using a descriptive-analytical approach and a mixed methodology (qualitative and quantitative) (Chui & McConville, 2025). This methodology is the most appropriate for an approach that consists of characterizing the ESTG Masters scientific event and analysing its relevance to the master's degrees of the Departments of Legal and Social Sciences. To this end, two categories of data were collected and processed.

A) Documentary data: including event programmes and regulations, institutional information provided by ESTG through different communication channels, and relevant clarifications provided by the course directors involved. B) Empirical data: collected through satisfaction questionnaires distributed to participants; and semi-structured interviews conducted with six students, selected for having been awarded the “BEST PAPER - ESTG Masters” prize, a criterion defined in order to ensure contact with students with recognized performance.

In terms of time, the data collected is from the last three editions (2023-2025), a period that corresponds to the beginning of the Master's in Digital Legal Practices' participation in the event. Currently, eight ESTG master's degrees participate in ESTG Masters, however, for the purposes of this study, the sample was limited to the two master's degrees belonging to DCJS, namely the Master's Degree in Legal Practice and the Master's Degree in Digital Legal Practices. This will therefore be the subject of the analysis. The data collected were subject to descriptive treatment, complemented by content analysis in the case of interviews and open-ended questionnaire responses.

## **6. Evidence and Results**

The analysis of the last three editions of ESTG Masters (2023, 2024, and 2025) allowed us to identify relevant evidence on student participation, satisfaction, and the educational contributions of the event in the context of DCJS master's degrees.

## **6.1. Questionnaires**

In 2023, the Analysis Report on the Satisfaction Assessment Questionnaires for the 13th edition was not prepared because it did not reach the minimum number of five responses from participants. As a result, there is no quantitative data for 2023. On the other hand, data collected in 2024 and 2025 show that student satisfaction is high, representing the total respondent population from the two DCJS master's programmes analysed. In 2024, the overall assessment was mostly positive: 85% of respondents gave the maximum score (4 on a scale of 1–4) to the question regarding the fulfilment of expectations. In 2025, positive results were also recorded, with 86% of respondents giving the maximum score in the same dimension. The assessment of professional added value was also positive: in 2024, 69% of respondents gave the highest score; in 2025, this figure rose to 86%. The questionnaire analysis reports also show strong motivation related to interest in the topics presented. In the 2024 edition, 77% of respondents indicated “interest in the topic” as their main motivation for registering. In 2025, the same trend was repeated, with 86% of respondents identifying this motivation. In both 2024 and 2025, 100% of respondents indicated the consistency and curricular alignment of the event.

## **6.2. Interviews**

In addition to the quantitative data, semi-structured interviews were conducted with six students, selected for having been awarded the “Best Paper – ESTG Masters” prize in different editions of the event included in the sample. The content analysis of the interviews identified three overall contributions of ESTG Masters to the training process of master's students:

- a) Improved oral and written communication skills: students reported that the event was an opportunity to practice scientific writing and oral presentation, thereby improving their argumentation skills. Participants specifically highlighted the challenge of synthesizing legal complexity for a non-specialist audience. It should also be noted that students felt an improvement in the structure of their discourse when interacting with the audience.
- b) Persistence in writing the dissertation: several interviewees reported that having to present a paper on the scientific work they are developing is a strong contribution to not losing focus and maintaining the pace of work in the year they are writing their dissertation. The public nature of the event was described as a 'catalyst' that prevented typical second-year stagnation.
- c) Validation of research: students associate participation in the event with a form of validation and academic recognition of their research, increasing their confidence and motivation. The recognition was perceived not just as an award, but as a formal validation of their academic legitimacy.

The interconnection of the quantitative and qualitative data presented allows us to conclude that the ESTG Masters programme promotes the development of cross-cutting skills such as oral communication, structuring and systematizing information, scientific literacy, and emotional management in front of an audience. These skills are relevant in the context of a master's degree in legal sciences, where communication and argumentation skills and critical analysis of problems are required.

## **7. Discussion of Results**

The ESTG Masters cannot be reduced to a formal requirement attached to the master's degree. In practice, it moves dissertation work out of a largely private setting and exposes it to collective scrutiny, at a stage of training that is usually marked by isolation. This shift affects how students relate to their writing, not only as a technical task, but as an activity that must withstand public discussion. Results from the 2024 and 2025 editions point to consistently high levels of student satisfaction. These figures, however, need to be read with caution. Satisfaction reflects how participants perceive the format of the event and their immediate experience of it, rather than providing a direct account of how learning processes unfold. Positive evaluations signal acceptance, but they say little about why the effects of participation differ across students.

Within legal education, where teaching is still largely organised around lectures, the requirement to argue publicly represents a significant departure from routine practice. Students did not approach the event merely as an administrative obligation. For many, it functioned as an opportunity to test their capacity to explain and defend their work. Responses varied. Some students adapted quickly to feedback and discussion, while others found it more difficult to adjust to assessment criteria that placed emphasis on synthesis and argument rather than the reproduction of sources. Preparing to justify methodological choices before an academic panel imposed a level of discipline that private writing often lacks. Several students noted that this exposure brought weaknesses in their work to the surface earlier than they had anticipated. Although demanding, this process made it possible to address problems that might otherwise have remained unnoticed until the final stage of submission.

The timing of the event also mattered. By introducing an intermediate moment in the academic calendar, the ESTG Masters helped structure the dissertation year and counter feelings of isolation commonly associated with individual research. Its impact, however, was not automatic. Students reported that the effects were more sustained when issues raised during presentations were taken up again in supervision. Where this link was absent, the formative value of the exercise tended to weaken. Finally, participation in the event carried a symbolic dimension. Forms of recognition such as the “Best Paper” award contributed to students' sense that their work was taken seriously within an academic setting. This did not

remove doubts about quality, but it did influence how students positioned themselves in relation to their research, reinforcing a developing sense of academic legitimacy. Furthermore, this model proves highly replicable for other institutions seeking to break lecture-based inertias in professional fields like Law.

## **8. Conclusions**

The analysis undertaken in this article demonstrates that ESTG Masters constitutes a structuring academic practice in the formative path of master's students in the Department of Legal and Social Sciences at ESTG. The integrated analysis of documentary data, satisfaction questionnaires, and interviews shows that this scientific event goes beyond the mere public presentation of academic work, establishing itself as a pedagogical instrument with an effective impact on the development of essential soft skills.

The results demonstrate a high level of participant satisfaction and widespread recognition of the event's academic and professional relevance. Students tended to link the initiative's relevance to specific aspects of their work. References to clearer scientific communication, better organization of ideas, and greater mastery of argumentative structure were recurring themes. Several also highlighted that the public presentation of their ongoing work helped them maintain momentum and motivation during the thesis writing phase, especially during periods of stagnation. The interviews offer a more nuanced perspective on this observation. Participation in the ESTG Master's program was not perceived simply as an opportunity to present results, but as a moment when ongoing research became visible and underwent collective evaluation. This visibility validated the effort invested and influenced students' interpretation of the academic value of their work. While this visibility did not dispel doubts about the quality of the work produced, it did contribute to strengthening confidence in the legitimacy of their research paths. In this sense, the event promotes a more comprehensive educational experience, directly fostering communication skills, dissertation perseverance, and scientific validation in legal training.

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